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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,687

04/05/2006

Ikuo Morita

Q94143

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23373 7590 11/26/2010  
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EXAMINER

KIM, TAEYOON

ART UNIT

PAPER NUMBER

1651

NOTIFICATION DATE

DELIVERY MODE

11/26/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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PPROCESSING@SUGHRUE.COM  
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<b>Office Action Summary</b>	<b>Application No.</b> 10/574,687	<b>Applicant(s)</b> MORITA ET AL.	
	<b>Examiner</b> Taeyoon Kim	<b>Art Unit</b> 1651	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-7 and 9-18 is/are pending in the application.
- 4a) Of the above claim(s) 10-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-7,9 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

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### **DETAILED ACTION**

Applicant's amendment and response filed on 9/21/2010 has been received and entered into the case.

Claims 2 and 8 are canceled, claims 10-17 have been withdrawn from consideration as being drawn to non-elected subject matter, and claims 1, 3-7, 9 and 18 have been considered on the merits. All arguments have been fully considered.

### ***Claim Rejections - 35 USC § 103***

The rejection of claims 1, 3-7, 9 and 18 under 35 U.S.C. 103(a) as being unpatentable over Georger et al. (of record) in view of Kobayashi et al. (of record) and Singhvi et al. (US 5,776,748) is maintained for the reasons of record and the reasons set forth below. The rejection was fully explained in a prior Office action. See p. 2-6 of the Office action mailed on 5/20/2010.

### ***Response to Arguments***

Applicant alleged that Singhvi is not sufficient to make up the deficiency of Georger because Georger is not deficient for failing to teach or suggest merely a "transfer step" but the limitation of "transferring the adhered cells ... in the patterned state." Applicant asserted that Singhvi teaches retrieving (transferring) individual cells positioned on islands of specified coordinates, And the transfer of each cell from the primary plate to the secondary plate in Singhvi is for the purpose of selecting such individual cells positioned on islands of specified coordinates. Applicant interpreted this teaching of Singhvi such that the transfer step disclosed in Singhvi does not teach or suggest transferring cells in a patterned state.

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The Examiner respectfully disagrees with the applicant's conclusion. As Applicant clearly discussed that the transfer step of cells with specified coordinates (emphasis added) is considered as the cells in patterned state. Singhvi discloses numerous times that the plates are patterned, or have predetermined coordinates/pattern for the cells, and teaches a step of transferring desired cells on island (predetermined position) from the first plate to the second plate (see col. 17-18). This teaches that the cells on the first plate is in patterned state, and when the desired cells being transferred to the second plate, the exact coordination for the cells being transferred would be intact on the second plate, and thus, these cells transferred to the second plate are considered in patterned state, rather than cells being release randomly and losing their original coordination. It appears that Applicant interprets the teaching of Singhvi as if only one cell being transferred to the second plate, and thus, there is no pattern for the individual cell transferred to the second plate. It is acknowledged that Singhvi discloses an embodiment directed to a single cell transferred to the second plate.

However, Singhvi also discloses in col. 18, lines 8-18;

“In addition, secondary plates could be produced which would retrieve more than one cell by constructing a secondary plate with biophilic SAM islands corresponding spatially to more than one island on the primary plate. Further to enhance transfer of the desired cell or cells from the primary plate to the secondary plate, it may be desirable to have larger islands of biophilic SAM on the secondary plate or to use a biophilic SAM on the secondary plate with a higher binding affinity for the desired cell or cells than the biophilic SAM on the primary plate.”

This teaching is directed that cells on multiple islands can be transferred at the same time to the second plates having corresponding islands to the primary (first) plate. By carrying out this particular embodiment, one can obtain the cells being transferred from the first plate to the second plate in patterned state.

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Applicant further alleged that the transfer step of Singhvi is expressly applied to cells identifiably segregated on the islands of the primary plate, however, Georger does not segregate individual cells on the patterned substrate. Instead, Georger is directed to the outgrowth of cells in a cell culture. Applicant concluded that a skilled artisan would readily appreciate the fundamental difference between outgrowth in a cell culture and segregation of individual cells, and thus, a skilled artisan would not have applied the transfer step of Singhvi to the patterned substrate of Georger.

Applicant's arguments have been fully considered but they are not persuasive.

It is understood that the "outgrowth" of the cells taught by Georger is considered as a result of the culturing cells in a desired pattern, and one skilled in the art would understand that the method step of transferring desired cells from the first plate to the second plate taught by Singhvi can be followed by culturing the cells in predetermined pattern on the second plate. Thus, a person of ordinary skill in the art would try the transfer step of Singhvi in the method of Georger, and thereby one skilled in the art would selectively transfer desired cells in a pattern from the first plate to the second plate, and then culture to outgrow the cells on the second plate for the subsequent use.

### ***Conclusion***

No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taeyoon Kim whose telephone number is (571)272-9041. The examiner can normally be reached on 8:00 am - 5:00 pm ET (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Taeyoon Kim/

Primary Examiner, Art Unit 1651